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MEASURING QUALITY IN FAMILY, FRIEND, AND NEIGHBOR CHILD CARE Conceptual and Practical Issues

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The Research-to-Policy Connections series summarizes current research on key topics in child care and early education and discusses implications for policymakers. This brief explores considerations and challenges in measuring quality in family, friend, and neighbor child care, especially:

- ▶ Parent choice and definitions of quality
- ▶ Concerns with commonly used measures of quality originally designed for other settings
- ▶ New quality measurement advances for family, friend, and neighbor care
- ▶ Testing measures for cultural appropriateness and competency

For further discussion of initiatives to support family, friend, and neighbor care see the Research-to-Policy Connections brief: *Assessing Initiatives for Family, Friend, and Neighbor Child Care: An Overview of Models and Evaluations*, by Toni Porter.

Introduction

The contribution of family, friend, and neighbor caregivers to the overall supply of child care and the care and education of our nation's youngest children is substantial. Family, friend, and neighbor caregivers are home-based license-exempt caregivers with a familiar relationship to the family. They consist of nonparental relatives, friends, and neighbors. Often they are unpaid and usually care for one or two children at a time. Over 40 percent of all nonparental child care hours for infants and toddlers are spent in family, friend, and neighbor care, as are almost a third of all hours for preschoolers (Human Services Policy Center, 2005). Thirty-one percent of children under age 5 with employed parents are in family, friend, or neighbor care as their primary care arrangement (Sonenstein, Gates, Schmidt, & Bolshun, 2002). Twenty-three percent of children in subsidized child care are in family, friend, and neighbor settings (U.S. Child Care Bureau, 2006).

A desire to know more about quality in family, friend, and neighbor settings is emerging due to increased public awareness about the number of children served in this setting, rising public investments, and new national priorities for assuring all young children are ready for school. As a result, the field is beginning to wrestle with how to measure quality in a setting often more like the care provided by parents, but simultaneously a segment of the nonparental child care market responsible for educating and caring for young children (See, for example, Porter, 2007). Concerns about quality are directly aligned with assuring all children receive early learning and developmental experiences to optimize their success in school and life.

This brief explores, for policy and other audiences, some of the issues around measuring quality in family, friend, and neighbor care. The purpose is not to provide a comprehensive review of studies addressing quality in this setting (see Brown-Lyons, Robertson, & Layzer, 2001; Porter, Rice & Mabon, 2003; Susman-Stillman, forthcoming, for such reviews), but rather to describe some of the challenges of this effort. It discusses reasons parents' choose this care and their associated definitions of quality, distinguishing characteristics of this care, and concerns with commonly used measures not designed for use in this setting. It also highlights some new advances in the field around definitions and measurement, the need to determine usefulness and relevance of new instruments, and some practical suggestions for testing cultural appropriateness and competency.

Background

New public and private efforts to support children in family, friend, and neighbor settings are developing. A survey conducted by the National Association of Child Care Resource and Referral Agencies reports that 4 percent of child care providers participating in Child Care Resource and Referral trainings are family, friend, and neighbor caregivers (Smith, Sarkar, Perry-Manning, & Schmalzried, 2007). A recent review of child care quality improvement efforts finds 23 states have publicly funded initiatives to support family, friend, and neighbor care (Porter & Rice, 2004). Thirty-seven percent of states include family, friend, and neighbor caregivers in professional development activities funded through each state's mandatory quality set-asides of their Child Care and Development Fund block grants (Pittard, Zaslow,

Lavelle, & Porter 2006). Equally important are the contributions of private funders and public-private partnerships for providing supports to this population. While investments in this setting certainly do not match the prevalence or investments in licensed care, they are, nonetheless, on the rise.

With increased investments come new challenges. Namely, what do we hope to achieve from our investments? How can we be accountable for our investments? And, how do we measure effectiveness? Thus, the issue of quality, which has long been identified as an area of concern for licensed child care, is emerging as a critical issue to address in family, friend, and neighbor settings.

Why Measure Quality?

From a research and policy perspective, researchers, advocates, and policymakers may want to measure quality in family, friend, and neighbor settings to:

- ▶ Compare children's early education experiences across settings.
- ▶ Compare children's experiences within family, friend, and neighbor settings by characteristics of children or caregivers.
- ▶ Measure the effectiveness of interventions and investments to demonstrate accountability.
- ▶ Link quality of child care settings with children's school readiness outcomes, including social, emotional, and cognitive development.
- ▶ Determine the supports, sources of information, and resources caregivers need to provide better quality care for young children and support their own well-being.

The field needs a clear set of quality goals to guide the development and delivery of interventions and standards to judge their effectiveness. Without clear definitions of quality and appropriate ways to measure it, we risk misunderstanding and misrepresenting the experiences of children and families using this type of care.

Considerations in Measuring Quality in Family, Friend, and Neighbor Care

Parental Choice and Definitions of Quality

Parents' definitions of quality are an important starting point for examining quality in child care settings. Parents value quality child care for their children. How they define quality, however, varies by the type of care they choose. Parents using licensed care are more likely to emphasize professional standards, such as the training and credentials of the providers, in their definitions of quality than parents choosing unlicensed care (Brown-Lyons, Robertson, & Layzer, 2001). And, parents using family, friend, and neighbor care are more likely to highlight trust and familiarity (Brandon, Maher, Joesch, & Doyle, 2002; Chase, Arnold, Schauben, & Shardlow, 2005). How parents define quality influences choice among types of care, but the care type may also shape parents' definitions of quality.

The type of child care parents use reflects both choice and constraint. Many parents choose family, friend, and neighbor care regardless of what other options are accessible to them. Some parents report a preference for relative care, but do not have a relative available or nearby and thus have to choose other options (Crispell, 1994). On the other hand, some use family, friend, and neighbor care because of scheduling or monetary constraints and would prefer to have their children in other settings (Brown-Lyons, Robertson, & Layzer, 2001; Phillips & Bridgman, 1995). And preferences for care type can change over time. In general, parents use family, friend, and neighbor care more often for infants and toddlers than they do for their preschool-aged children (Human Services Policy Center, 2006).

Parents often choose family, friend, and neighbor care for reasons that do not reflect professional or regulated standards of quality. These reasons may include shared values around childrearing, shared religious values, and solidifying family bonds. The desire for cultural and language congruity may also underlie many parents' preferences for this type of care (Kreader & Lawrence, 2006). Often, these preferences can be uniquely met in this setting and distinguish this care from other types. Measures of quality are needed that accurately incorporate and reflect the values parents express when choosing child care and the unique ways in which this care is able to match these values. Professional definitions of quality are one criterion parents use in choosing care, but by no means the only one.

Distinguishing Characteristics of Family, Friend, and Neighbor Care

Without overgeneralizing, family, friend, and neighbor care has some positive attributes that distinguish it from other types of care. First, the typically low adult-to-child ratios can provide for more individualized attention. Low adult-to-child ratios do not guarantee high-quality interaction between the child and the caregiver, but are significantly and positively associated with it in licensed settings.

Family, friend, and neighbor caregivers are often related to or in a close relationship with the child. And a common motivation for providing care is to spend more time with the child (Brandon, Maher, Joesch, & Doyle, 2002; Chase, Arnold, Schauben, & Shardlow, 2006). Second, forming a strong, secure, and stable attachment with a caregiver is a key component of young children's development. Thus, strong attachment relationships may be more likely to be achieved in this setting, although evidence on this point is mixed. Galinsky, Howes, Kontos, and Shinn (1995) actually found lower levels of attachment among predominantly low-income relative caregivers than unrelated caregivers. A more recent study, however, found responsive, warm, and affectionate interactions between caregivers and children (Tout & Zaslow, 2006). And, caregivers themselves report this as a strength of the care they provide (Anderson, Ramsburg, & Rothbaum, 2003).

Since poverty is consistently associated with children's educational outcomes, many low-income young children are at risk for entering school unprepared. Among low-income populations, family, friend, and neighbor caregivers may be more likely than caregivers in other income groups to have distinguishing characteristics of some concern for promoting school readiness due to the consequences of living in poverty. Poverty and economic status are often intergenerational, and economic segregation in housing is prevalent; thus low-income

children's caregivers are likely to mirror their social and economic characteristics. Low-income caregivers are likely to have less education than the general population and to lack the material and informational resources helpful for enhancing child development. Furthermore, families experiencing economic stress may face challenges in forming secure attachments.

Lack of Applicability of Common Structural Quality Measures

Many commonly used measures of structural quality in licensed child care are not always as useful or relevant for evaluating quality in family, friend, and neighbor care. These measures include adult-to-child ratios, number of children in a group, and educational background of providers. In licensed settings, these indicators of quality are policy, operational, and cost choices once regulatory requirements have been met, and variation among licensed settings is thus more likely. Family, friend, and neighbor care often looks more like care within families, such as that between parents and children, than child care in group settings. Since family, friend, and neighbor caregivers typically only care for one or two children at a time, there is little variation in adult-to-child ratios, and the concept of group size is irrelevant.

Similarly, another measure of structural quality—the educational background of the providers—has a different application to family, friend, and neighbor settings. Licensed settings can recruit and retain staff of desired education levels or offer training and educational incentives to increase education levels. The same is not generally the case for family, friend, and neighbor caregivers, most of whom do not see themselves as child care professionals. While many caregivers express interest in caregiving support and information (Brandon, Maher, Joesch, & Doyle, 2002), formal education is not generally something caregivers are likely to pursue. And, unlike licensed settings, this professional standard of quality is not always consistent with why parents choose family, friend, and neighbor care in the first place. Rather, parents primarily choose family, friend, and neighbor care for reasons of familiarity and trust, and of course, availability. The lack of feasibility and policy malleability for improving family, friend, and neighbor caregiving quality with formal education requirements and the inconsistency of this approach with the reasons why parents choose this type of care, raises some concerns about the applicability of caregiver education as a standard of quality in this setting.

In the same vein, quality measures should be sensitive to material resource requirements. Caregivers may not have the economic resources to provide a visually pleasing and resource-heavy physical environment, including spacious and comfortable surroundings and an abundance of store-bought educational materials and toys. And, unlike licensed settings, the majority of this care is unpaid, further limiting the ability of many caregivers to purchase such materials and provide such furnishings (Brandon, Maher, Joesch, & Doyle, 2002; Chase, Arnold, Schauben, & Shardlow, 2006). While the resources to provide basic health and safety standards for children in all settings should be ensured, care should be made to evaluate quality separately from the particular constraints of a caregiver's economic circumstances.

Finally, some early education specialists argue that definitions of quality, even in licensed settings, should move beyond these standard structural measures and include assessments of the cultural and linguistic diversity and skills of the workforce (Chang, 2006). Since family, friend, and neighbor caregivers are often from the same cultural and linguistic background

as the child, the ability to provide culturally appropriate services, build and reinforce cultural values and heritage, and support the cultural attributes and assets of families is maximized. In fact, this reason is why many families choose family, friend, and neighbor care in the first place. In summary, measures of quality for family, friend, and neighbor care should reflect strengths as well as weaknesses and focus on aspects of the care environment that can be changed and improved.

Current Measures

The Family Day Care Rating Scale (FDCRS) is the most commonly used instrument for evaluating quality in family, friend, and neighbor care despite some reservations about its appropriateness for this setting. For instance, many of the items may not be applicable to the setting or may penalize family, friend, and neighbor caregivers without the resources to achieve certain spatial and material standards. In fact, the FDCRS developers explicitly distinguish between family child care settings and the child's home environment, which may be more aligned with family, friend, and neighbor care. "The FDCRS tries to remain realistic for family day care home settings by not requiring that things be done as they are in day care centers. Yet a family day care home should not be thought of as simply the private home of a family; it must provide the necessary additional organization, space, materials, activities, and interaction to give developmentally appropriate experiences to the children who are enrolled there for day care." (FPG Child Development Institute, n.d.). Some recent large studies encompassing family, friend, and neighbor care have not used this instrument or used it with strong reservations because of bias towards negative attributes of the care setting (such as Tout & Zaslow, 2006) or the concern that licensed settings will automatically produce higher-quality ratings (for example, Fuller, Kagan, Loeb, & Chang 2004).

Using indicators focused entirely on the quality of the interaction between the caregiver and the child is one solution. This approach relies on more proximate measures of quality—measures tied more directly to the nature of the caregiving itself—and allows comparisons of findings across settings. Studies relying on these process or interaction measures use them in combination with the FDCRS or in place of it. Examples of such measures include the Observational Record of the Caregiving Environment (ORCE) (NICHD Early Child Care Research Network, 1996), Arnett Caregiver Interaction Scale (Arnett, 1989), and the Child-Caregiver Observation System (C-COS) (Boller, Sprachman, & the Early Head Start Research Consortium, 1998).

The FDCRS continues to be relied upon because of the need to have instruments that are relatively easy to administer, have been widely used and grounded in established research, and have good psychometric properties. Such needs can curtail or stall the adoption of new, more appropriate, and refined measures. For these reasons, new developments in the field need time to become established.

New Developments

New efforts to define quality in family, friend, and neighbor care are underway. Sparking Connections, a national consortium of stakeholders involved in efforts to implement and evaluate supports for family, friend, and neighbor caregivers has produced a report with principles for defining quality in this setting (O'Donnell et al., 2006). These principles have not been translated into assessment tools and are presented as preliminary recommendations only. They were developed with the goal of defining the conditions that help promote children's healthy development while building on the expertise of people working with this population of caregivers. The principles are divided into the following categories: caregiver and child relationships; encouraging healthy development; caregiver-parent relationships; caring for caregivers; and health and safety.

Quality in family, friend, and neighbor care can also be defined through school-readiness guidelines or early learning standards if translated to all settings, not just licensed settings. For example in Hawai'i, The Family and Community Guidelines to Support Preschool-Aged Development takes school readiness guidelines for 4-year-olds in preschool and translates them to strategies appropriate for family and community members, including family, friend, and neighbor caregivers (School Readiness Task Force & Hawai'i Good Beginnings Interdepartmental Council, 2006). Under the guideline for the development of gross motor coordination, for example, this document provides the following suggestion: "Encourage your child to help with household chores that develop large muscles: watering, sweeping, raking, dusting, laundry, vacuuming, carrying small bags." (p. 6). These guidelines focus on the following areas: physical development (including health and safety); personal and social development; communication, language development, and literacy; cognitive development; and creative development. This report is a good example of illustrating distinct ways to achieve the same outcomes (school readiness) in different settings.

New instruments that also implicitly contain definitions of quality are being developed to overcome some of the limitations of the existing measures discussed previously. Toni Porter and her colleagues at Bank Street College of Education developed a new tool designed specifically to measure quality in relative care—The Child Care Assessment Tool for Relatives (CCAT-R) (Porter, Rice & Rivera, 2006). The quality dimensions measured by the tool were developed from focus groups, literature reviews, and consultation with experts. They include support for physical development (including health and safety), support for cognitive development, support for language development, support for social/emotional development, behavior management, and relationship with parents. The instrument involves observations of relative providers by trained observers. One unique feature is assessing the quality of the caregivers' relationship with the parent—a critical component of this type of care. And, unlike other instruments that focus only on one particular developmental aspect, it includes all developmental components within one framework. This instrument is explicitly designed not to produce lower-quality scores for caregivers with fewer financial and material resources as long as certain baseline standards for health and safety are met.

Abt Associates has also developed an observation instrument to rate the quality of early childhood settings including family, friend, and neighbor care. The instrument, the Quest,

includes an Environmental Checklist and Provider Rating Scale (Goodson, Layzer, & Layzer, 2005). Developed for the National Study of Child Care for Low-Income Families, items were adapted from accreditation materials of the National Association for Family Child Care. The Provider Rating Scale focuses primarily on child-caregiver interactions and caregiver's support for children's learning. Unlike the CCAT-R, this instrument is not designed solely for use in family, friend, and neighbor care, and thus has the advantage of comparability with other settings. New research using this instrument in family, friend, and neighbor settings will allow the field to judge its usefulness for describing and evaluating this setting.

The development of these instruments and other efforts to define quality are a great addition to the field. As new measures become more widely used, some strengths and limitations may emerge, and modifications may be recommended. New instruments need to be field-tested to determine their psychometric properties (see discussion below), and additional research will allow other properties to emerge.

Instrument Properties and Cultural Appropriateness

The psychometric properties of a new instrument need to be established before a measure is useful. Psychometric properties establish the usefulness and effectiveness of an instrument. These properties describe whether or not an instrument accurately, reliably, and consistently measures the concept under investigation and are established through a variety of tests. They are intertwined with the theoretical basis from which the instrument was developed—the definitions and dimensions of the concept being measured. Validity refers to the extent to which an instrument measures what it is supposed to be measuring. Reliability is the extent to which an instrument is consistent. Validity and reliability both have multiple dimensions.¹

While not a psychometric property of an instrument, the relevance of an instrument to application in different subpopulations—or its cultural appropriateness—is also a key consideration. Childrearing practices, and views on childhood, development, and the needs of children vary across cultures. Definitions of family, friend, and neighbor quality must take this variation into account, be subject to assessment of cultural relevance, and not promote culturally inappropriate prescriptions or invalidate culturally diverse approaches to healthy child development. The instrument content and method of administration need to be validated for use with diverse cultural groups, non-English speaking populations, children with special needs, and illiterate respondents. Establishing the cultural relevance of a research instrument is critical for the population using family, friend, and neighbor care. Low-income families and families from diverse racial and ethnic groups, including immigrant and refugee populations, rely heavily on this type of child care. In addition, a significant proportion of family, friend, and neighbor caregivers report caring for a child with special needs (Brandon, Maher, Joesch, & Doyle, 2002).

One mechanism for evaluating both concepts and methods is to have a formal review with representatives from many cultural groups even while acknowledging the diversity of perspectives within a given cultural group. As an example, the Human Services Policy Center at the University of Washington recently convened a cultural review of the content and delivery of

an attachment theory-based curriculum, Promoting First Relationships (Kelly, Zuckerman, Sandoval, & Buehlman, 2003). This program is designed to help caregivers foster social and emotional development in young children. In general, the representatives from several different racial and ethnic groups did not dispute the concepts of attachment theory embedded in the curriculum, but agreed modifications need to be made for working with families from different cultures. These modifications include spending more time on concepts that might be less familiar and teaching new skills in different ways. Unfamiliar concepts and skills, such as the delivery of praise, for example, should not be shied away from if they can be beneficial to families. At the same time, interventionists should be tasked with validating and supporting different cultural expressions of caregiving. An approach incorporating new skills and validating distinct cultural approaches has the added benefit of helping families become effectively bicultural.

Measures of quality must be subject to the same cultural reflection as definitions, including wording of questions, examples used, and the mode of administration. General principles for conducting culturally competent research, relevant to the assessment of quality in family, friend, and neighbor settings, at a minimum, include the following:

- ▶ Choose instruments and approaches that have been tested and implemented with diverse communities. Validate new instruments within diverse populations and make modifications accordingly.
- ▶ Solicit formal feedback on research instruments, and approach cultural representatives and consultants prior to implementation. Be willing to make adaptations based on this feedback.
- ▶ Make resources available for translation, cultural consultation, and bilingual staff for conducting the research.
- ▶ Foster open and reciprocal relationships between the researcher and the respondent.
- ▶ Use flexible protocols for research methods to reflect different literacy levels, levels of acculturation, and cultural preferences of the research participants.
- ▶ Provide ongoing opportunities for participants and data collectors to debrief about the cultural relevance of the instrument content and methods as it is being used with diverse groups.
- ▶ Provide forums for sharing research results with participants and receiving feedback that affects the interpretation of results.
- ▶ Rely on up-to-date research on culturally competent methods and service delivery, paying particular attention to research on culture within the target population.

Evaluating the usefulness of an instrument requires other considerations, as well. How is the instrument administered? How easy is it to use? How much training is required? How much does it cost to administer? How are results interpreted and summarized? How can results of the instrument be compared across settings, if at all? The field could benefit from a detailed summary of both the technical and operational properties of new and existing instruments used in family, friend, and neighbor settings, as well as their cultural applicability for different populations.

Policy Environment

Measures of quality in family, friend, and neighbor care should also include assessments of the larger context in which this caregiving occurs. In other words, what are the coherent policies and funding sources to support children and caregivers? What supports are available to caregivers in the community and how are caregivers being linked to these resources? What are the linkages among the early learning system as a whole? In licensed centers, quality is compromised without adequate funding and appropriate activities to promote and assure quality. We measure quality in these settings to ensure children's development is optimally supported, advocate for more funding, and document changes over time with increased investments. If we want children in all settings to receive quality early learning experiences, investments in support and resources need to be made. Otherwise, why bother to measure quality at all?

Conclusion

Efforts to measure quality in family, friend, and neighbor care are relatively recent, and more work needs to be done to establish or modify new definitions and instruments appropriate for this setting. A thorough review of other measures used in similar fields, such as parent education and family support, that might also be applicable and relevant to understanding quality in this setting could be part of this effort. In order to build a much needed evidence base for effective programs to enhance and support quality in family, friend, and neighbor care, knowledge and availability of established tools is necessary.

References

- Anderson, S. G., Ramsburg, D. M., & Rothbaum, B. (2003). *Illinois study of license-exempt child care: Interim report*. Springfield, IL: Illinois Department of Human Services. <www.researchconnections.org/location/ccrca2968>
- Arnett, J. (1989). Caregivers in day-care centers: Does training matter. *Journal of Applied Developmental Psychology*, *10*(4), 541-552. <www.researchconnections.org/location/ccrca278>
- Boller, K., Sprachman, S., & the Early Head Start Research Consortium. (1998). *The Child-Caregiver Observation System instructor's manual*. Princeton, NJ: Mathematica Policy Research, Inc. <www.researchconnections.org/location/ccrca8824>
- Brandon, R. N., Maher, E. J., Joesch, J. M., & Doyle, S. (2002). *Understanding family, friend, and neighbor care in Washington state: Developing appropriate training and support*. Seattle, WA: Human Services Policy Center, Evans School of Public Affairs, University of Washington. <www.researchconnections.org/location/ccrca207>
- Brown-Lyons, M., Robertson, A., & Layzer, J. (2001). *Kith and kin—informal child care: Highlights from recent research*. New York: National Center for Children in Poverty. <www.researchconnections.org/location/ccrca2085>
- Chang, H. (2006). *Getting ready for quality: The critical importance of developing and supporting a skilled, ethnically and linguistically diverse early childhood workforce*. Oakland, CA: California Tomorrow.
- Chase, R., Arnold, J., Schauben L., Shardlow, B. (2005). *Child care use in Minnesota: 2004 statewide household child care survey*. St. Paul, MN: Wilder Research. <www.researchconnections.org/location/ccrca7711>
- Crispell, D. (1994). Child-care choices don't match mom's wishes. *American Demographics*, *16*(7), 11.

- FPG Child Development Institute (n.d.). *Development of the FDCRS*. Retrieved September 1, 2006 from <www.fpg.unc.edu/~ecers/fdcrsdevelopment_frame.html>.
- Fuller, B., Kagen, S. L., Loeb, S., & Chang, Y. W. (2004). Child care quality: Centers and home settings that serve poor families. *Early Childhood Research Quarterly*, 19(4), 505-527. <www.researchconnections.org/location/ccrca4676>
- Galinsky, E., Howes, C., Kontos, S., & Shinn, M. (1994). *The study of children in family child care and relative care: Highlights of findings*. New York: Families and Work Institute. <www.researchconnections.org/location/ccrca2522>
- Goodson, B. D., Layzer, J. I., & Layzer C. J. (2005). *The Quest: Environment Checklist and Provider Rating for Early Childhood Care Settings—Revised*. Cambridge, MA: Abt Associates, Inc.
- Human Services Policy Center (2006). *Non-parental child care arrangements: An analysis of the National Household Education Survey, Early Childhood Program Participation Supplement*. Seattle, WA: Human Services Policy Center, Evans School of Public Affairs, University of Washington.
- Kelly, J. F., Zuckerman, T., Sandoval, D., Buehlman, K. (2003). *Promoting First Relationships*. Seattle, WA: NCAST-AVENUW Publications.
- Kreder, J. L. & Lawrence, S. (2006). *Toward a national strategy to improve family, friend, and neighbor child care: Report of a symposium*. New York: National Center for Children in Poverty. <www.researchconnections.org/location/ccrca10465>
- NICHD Early Child Care Research Network. (1996). Characteristics of infant child care: Factors contributing to positive caregiving. *Early Childhood Research Quarterly*, 11(3), 269-306. <www.researchconnections.org/location/ccrca589>
- O'Donnell, N. S., Cochran, M., Leikes, K., Diehl, D., Morrissey, T. W., Ashley, N., et al. (2006). *Sparkling Connections phase II: A multi-site evaluation of community-based strategies to support family, friend, and neighbor caregivers of children. Part I: Lessons learned and recommendations*. New York: Families and Work Institute. <www.researchconnections.org/location/ccrca11182>
- Phillips, D. A., & Bridgman, A. (Eds.). (1995). *New findings on children, families, and economic self-sufficiency*. Washington, DC: National Academy Press. <www.researchconnections.org/location/ccrca2092>
- Pittard, M., Zaslow, M., Bavelle, B., & Porter, T. (2006). *Investing in quality: A survey of state child care and development fund initiatives*. Washington DC: National Association for State Child Care Administrators and Child Trends. <www.researchconnections.org/location/ccrca9005>
- Porter, T. (2007). *Assessing initiatives for family, friend, and neighbor child care: An overview of models and evaluations*. New York: Child Care and Early Education Research Connections, National Center for Children in Poverty, Columbia University Mailman School of Public Health. <www.researchconnections.org/location/ccrca11787>
- Porter, T., Rice, R., & Mabon, S. (2003). *Doting on kids: Understanding quality in kith and kin child care*. New York: Institute for a Child Care Continuum, Bank Street College of Education. <www.researchconnections.org/location/ccrca3650>
- Porter, T., & Rice, R. (2004). *Using training initiatives to support quality in family, friend, and neighbor care*. New York: Institute for a Child Care Continuum, Bank Street College of Education.
- Porter, T., Rice, R., & Rivera, E. (2006). *Assessing quality in family, friend, and neighbor care: The Child Care Assessment Tool for Relatives*. New York: Institute for a Child Care Continuum, Bank Street College. <www.researchconnections.org/location/ccrca8823>
- Smith, L. K., Sarkar, M., Perry-Manning, S., & Schmalzried B. (2007). *NACCRRRA's national survey of child care resource and referral training: Building a training system for the child care workforce*. Washington, DC: National Association of Child Care Resource and Referral Agencies.
- Sonenstein, F. L., Gates, G., Schmidt, S. R., & Bolshun, N. (2002). *Primary child care arrangements of employed parents: Findings from the 1999 National Survey of America's Families*. Washington, DC: Urban Institute. <www.researchconnections.org/location/ccrca587>

Susman-Stillman, A. (forthcoming). *Quality of family, friend, and neighbor caregiving settings*. New York: Child Care and Early Education Research Connections, National Center for Children in Poverty, Columbia University Mailman School of Public Health.

School Readiness Task Force, & Hawai'i Good Beginnings Interdepartmental Council. (2004). *Family and community guidelines to support preschool-aged child development*. Honolulu: Good Beginnings Alliance.

Tout, K. & Zaslow, M. (2006). *Observations of child care provided by family, friend, and neighbor caregivers in Minnesota: A report of the Minnesota Child Care Policy Research Partnership*. Washington, DC: Child Trends. <www.researchconnections.org/location/ccrca10385>

U.S. Child Care Bureau. (2006). *FFY 2005 CCDF Data Tables, Table 6. Average Monthly Percentages of Children Served in All Types of Care. FFY 2005 CCDF Data Tables (July 2006 Preliminary Estimates)*. Retrieved September 1, 2006, from <www.acf.hhs.gov/programs/ccb/data/ccdf_data/05acf800/table6.htm>.

Endnotes

1. Construct validity assesses whether all the dimensions of the concept being measured are identified. A thorough review of the research literature and established theories helps determine the construct validity. If a key element of quality, such as support for children's healthy development, is not measured, the final score may not be an accurate reflection of overall quality. Content validity assesses whether the specific items successfully capture these dimensions. Concurrent validity is whether results produced by this tool are similar to results produced by other established tools measuring the same construct. Thus, while there are problems with the FDCRS as it applies to family, friend, and neighbor care, concurrent validity can be established by assessing whether the relevant items in the FDCRS designed to assess a similar quality dimension as the new measure produce the same results. Finally, predictive validity is the extent to which the measure successfully predicts an outcome to which it is theoretically posited. Thus, since research has established that quality of early learning environments is related to child outcomes, is the quality score produced by the measure similarly predictive of child outcomes?

Reliability refers to the extent to which an instrument is stable between different users and repeated measurements. Reliability also refers to the extent to which an instrument produces the same results for similar environments. That is, does the instrument produce a similar score for two very similar child care environments? Test retest reliability captures whether or not different administrations of the instrument in the same environment at two different points of time if no other change has taken place yield the same result. Interrater reliability is the extent to which different users of the instrument in the same environment produce the same result. Finally, internal consistency is another type of reliability. It is the extent to which multiple items designed to measure the same construct are correlated with each other. Internal consistency is also assessed by determining if the total score from a set of items uniquely defines the same condition. For example, a child care setting with a score of eight on a health and safety dimension should look very similar to another setting with a score of eight on this same dimension. Please see the Child Care Research Connections Web site for a research Glossary with these terms, in 'Understanding Research' (<www.childcareresearch.org/servlet/DiscoverResourceController?displayPage=resources/researchglossary.jsp>)

The CCAT-R, for instance, has undergone some psychometric testing including interrater reliability and content validity. The Quest instrument also has tested interrater reliability and is about to be used in a concurrent validity study with the new FDCRS (now referred to as FCCERS).

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